

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
CHARLESTON DIVISION

IN RE: AQUEOUS FILM-FORMING FOAMS PRODUCTS LIABILITY LITIGATION	MDL No. 2873 Master Docket No. 2:18-mn-2873 Judge Richard Gergel Civil Action No.: 2:23-cv-03557-RMG
COLUMBUS WATER WORKS, Plaintiff, v. 3M COMPANY (f/k/a Minnesota Mining and Manufacturing Company); AGC CHEMICALS AMERICAS INC.; AMEREX CORPORATION; ANGUS FIRE ARMOUR CORP.; ARCHROMA U.S., INC.; ARKEMA INC.; BASF CORPORATION; BUCKEYE FIRE EQUIPMENT COMPANY; CARRIER GLOBAL CORPORATION; CHEMDESIGN PRODUCTS, INC.; CHEMGUARD INC.; CHEMICALS, INC.; CLARIANT CORPORATION; CORTEVA, INC.; DAIKIN AMERICA, INC.; DEEPWATER CHEMICALS, INC.; DUPONT DE NEMOURS, INC.; DYNAX CORPORATION; E. I. DUPONT DE NEMOURS AND COMPANY; HONEYWELL INTERNATIONAL, INC.; HONEYWELL SAFETY PRODUCTS US, INC.; MINE SAFETY APPLIANCES COMPANY, LLC; NATION FORD CHEMICAL COMPANY;	DIRECT FILED COMPLAINT AND DEMAND FOR JURY TRIAL PURSUANT TO CASE MANAGEMENT ORDER NO. 3

NATIONAL FOAM, INC.; PERIMETER SOLUTIONS, LP; RAYTHEON TECHNOLOGIES CORPORATION; ROYAL CHEMICAL COMPANY; THE CHEMOURS COMPANY; THE CHEMOURS COMPANY FC, LLC; TYCO FIRE PRODUCTS, LP; UTC FIRE & SECURITY AMERICAS CORPORATION, INC.; VERDE ENVIRONMENTAL, INC. and JOHN DOE DEFENDANTS 1-20, Defendants.	
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COMPLAINT AND DEMAND FOR JURY TRIAL

Plaintiff, COLUMBUS WATER WORKS (“Plaintiff” or “CWW”), by and through its undersigned counsel, hereby files this Complaint against Defendants 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Company, AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA INC., ANGUS FIRE ARMOUR CORP., ARCHROMA U.S., INC., BASF CORPORATION, BUCKEYE FIRE EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION, CHEMDESIGN PRODUCTS, INC., CHEMGUARD INC., CHEMICALS, INC., CLARIANT CORPORATION, CORTEVA, INC., DAIKIN AMERICA, INC., DEEPWATER CHEMICALS, INC., DUPONT DE NEMOURS, INC., DYNAX CORPORATION, E. I. DUPONT DE NEMOURS AND COMPANY, HONEYWELL INTERNATIONAL, INC., HONEYWELL SAFETY PRODUCTS US, INC., MINE SAFETY APPLIANCES COMPANY, LLC, NATION FORD CHEMICAL COMPANY, NATIONAL FOAM, INC., PERIMETER SOLUTIONS, LP, RAYTHEON TECHNOLOGIES CORPORATION, ROYAL CHEMICAL COMPANY, THE CHEMOURS COMPANY, THE

CHEMOURS COMPANY FC, LLC, TYCO FIRE PRODUCTS, LP, UTC FIRE & SECURITY AMERICAS CORPORATION, INC., VERDE ENVIRONMENTAL, INC. and JOHN DOE DEFENDANTS 1-20, fictitious names whose present identities are unknown (collectively, “Defendants”), and alleges, upon information and belief, as follows:

INTRODUCTION

1. Plaintiff brings this action against Defendants to protect the public health, safety, welfare and environment; to comply with imminent U.S. Environmental Protection Agency (“EPA”) regulations; and to recover any and all past and future compensatory and/or consequential damages for the investigation, remediation, removal, disposal, treatment, and monitoring of the ongoing contamination of its surface water, infrastructures, facilities, and properties caused and/or created by Defendants’ products, punitive damages, attorneys’ fees and costs, as well as any and all other damages available as a result of the actions and/or inactions of Defendants.

2. Plaintiff, Columbus Water Works (CWW), is an executive department of the Columbus Consolidated Government between the City of Columbus, Georgia and Muscogee County, that provides water-related services and operates a public water supply system in Georgia.

3. Plaintiff CWW is responsible for providing potable water to individuals and businesses in and around Columbus, Georgia and U.S. Military Base Fort Moore, Georgia.

4. Plaintiff has a property interest in the water it appropriates, purchases, reclaims, treats, stores, and distributes, as well as its water sources, water supplies, piping, distribution system, water treatment plants, stormwater systems, wastewater systems, solids/biosolids removed during water processing, conveyances, infrastructure, and all lands, properties and facilities owned and/or operated by Plaintiff (collectively “Plaintiff’s Property”).

5. Per- and polyfluoroalkyl substances (“PFAS”), including perfluorooctanoic acid (“PFOA”), perfluorooctane sulfonic acid (“PFOS”), perfluorobutane sulfonic acid (“PFBS”), perfluorohexanesulphonic acid (“PFHxS”), perfluoroheptanoic acid (“PFHpA”), and perfluorohexanoic acid (“PFHxA”) have been detected in Plaintiff’s Property, including Plaintiff’s drinking water supply.

6. PFAS are man-made compounds that are persistent, toxic, and bioaccumulative when released into the environment, and pose a significant risk to human health and safety. PFAS have impacted Plaintiff’s surface water.

7. Defendants in this case are companies that designed, manufactured, formulated, marketed, distributed, sold, and/or assumed or acquired liabilities for the manufacture and/or sale of PFOA, PFOS, PFBS, the chemical precursors of PFOA and/or PFOS and/or PFBS, and/or products containing PFOA, PFOS, PFBS and/or their chemical precursors (collectively “Fluorosurfactant Products”), and/or assumed or acquired liabilities for the manufacture and/or sale of Fluorosurfactant Products.

8. Defendants’ Fluorosurfactant Products include, but are not limited to, Teflon, Scotchguard, waterproofing compounds, stain proofing compounds, paper and cloth coatings, waves, aqueous film-forming foam (“AFFF”), and various other products.

9. AFFF is a firefighting agent used to control and extinguish Class B fuel fires and is used at sites such as military bases, airports, petroleum refineries, and fire training centers.

10. Defendants’ AFFF contained PFOS, PFOA, PFBS, and/or the chemical precursors to PFOS and/or PFBS.

11. Defendants designed, manufactured, formulated, marketed, distributed, sold and/or assumed or acquired liabilities for the manufacture and/or sale of Fluorosurfactant Products with

the knowledge that these toxic compounds would be released into the environment during the intended uses of these Products, even when used as directed and intended by Defendants.

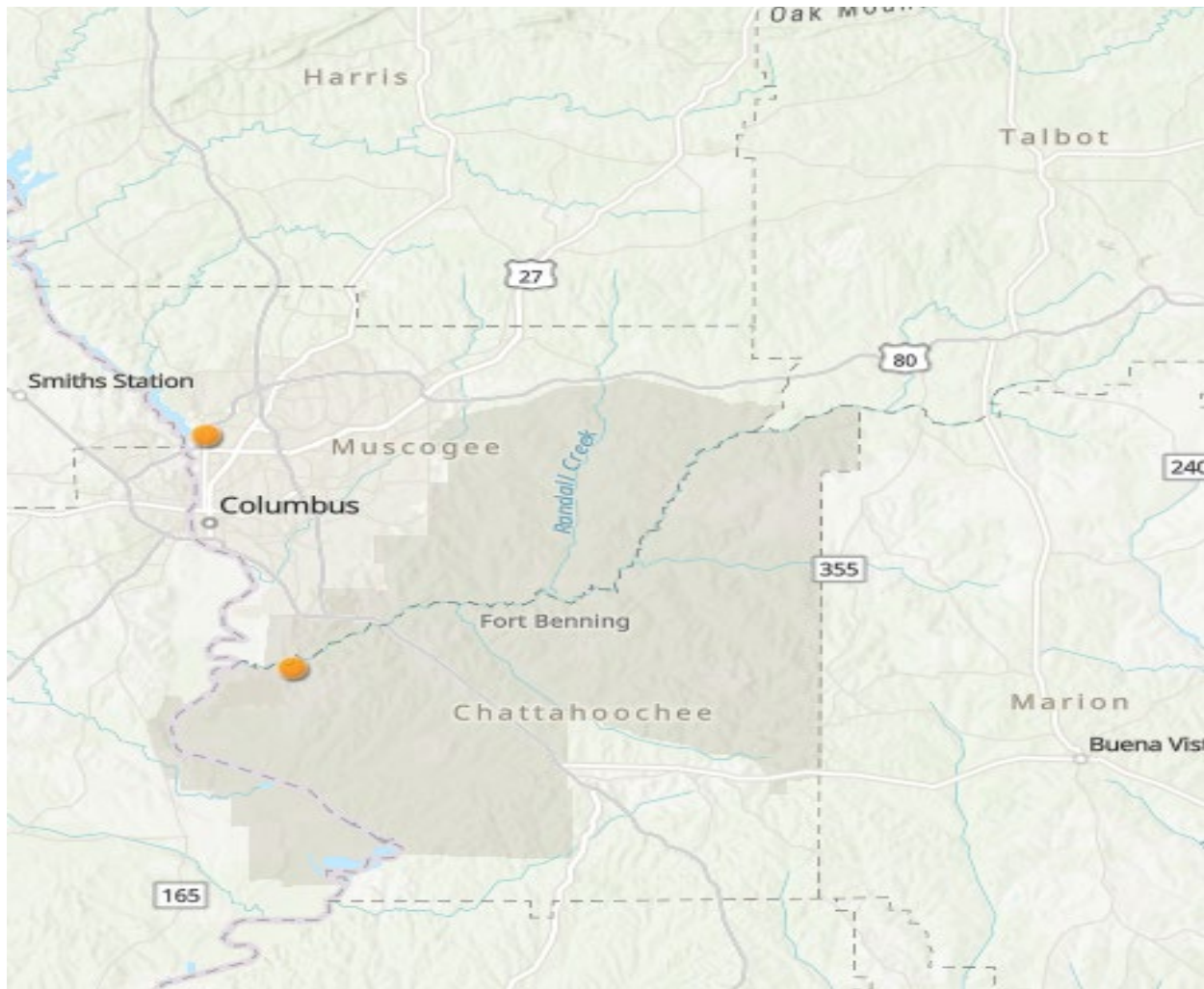
12. Most of CWW's water treatment capacity is handled by the North Columbus Water Resource Facility ("NCWRF"). NCWRF treats water from Lake Oliver, an impoundment on the Chattahoochee River. NCWRF's permitted capacity is 90 million gallons a day (MGD), and currently treats approximately 31 MGD.

13. Additionally, Fort Moore (formerly known as Fort Benning) is served by water coming from the NCWRF, as well as CWW's Fort Moore Water Treatment Plant ("FMWTP"). Fort Moore supports more than 120,000 active-duty U.S. military, reservists, retirees, civilians, and their family members. FBWTP treats water from the Chattahoochee River and serves the U.S. Army's Fort Moore Military Reservation in southern Muscogee County, Georgia, northern Chattahoochee County, Georgia, and Russell County, Alabama. FMWTP's permitted capacity is 8 MGD.

14. The Columbus water distribution system, which is supplied by the NCWRF, consists of approximately 1,170 miles of water mains.

15. The Fort Moore water distribution system, which is supplied by the FMWTP, consists of approximately 235 miles of water mains.

16. The map below is a screenshot from the Georgia Department of Natural Resources Environmental Protection Division website, which reflects the CWW Service Area. The northernly dot and southerly dot are the NCWRF and the FMWTP, respectively, both of which have registered PFAS testing results above the reporting limit or hazard index.



17. On information and belief, AFFF containing PFAS was used in and around the CWW Service Area for fire suppression activities.

18. CWW serves a region that includes the Columbus Regional Airport.

19. Title 14 Code of Federal Regulation Part 139 requires airport operators, such as the Columbus Airport, to maintain aircraft rescue vehicles and fire suppression operating systems, which utilize AFFF. To help ensure their operability, the Federal Aviation Administration (“FAA”) recommends testing these vehicles and systems every 6 months.

20. Upon information and belief, AFFF containing PFAS has been continuously discharged at the Columbus Airport for decades and has contaminated the surface water in and around the CWW Service Area.

21. As shown in the map above, Fort Moore (formerly Fort Benning) spans 284 square miles. Lawson Army Airfield is located at Fort Moore and has been an active military airport since before World War II.

22. Upon information and belief, AFFF containing PFAS has been continuously discharged at the Lawson Army Airfield.

23. Not knowing the true nature of the products consumers were required to use, AFFF containing PFAS has been continuously discharged throughout Fort Moore for decades.

24. The Columbus Fire Department maintains an active fire training center at 1905 3rd Avenue, Columbus, Georgia 31901 (“Columbus Fire Training Facility”), less than half a mile from the banks of the Chattahoochee River.

25. The Columbus Fire and Rescue division is ranked as a Class 1 fire-suppression program by the Insurance Services Office, the highest ranking reserved for superior programs. Qualifications to receive a Class 1 ranking include certain minimum training requirements, facilities and equipment.

26. Upon information and belief, the Columbus Fire and Rescue division, not knowing the true nature of the products they are required to use, has continuously discharged AFFF containing PFAS at the Columbus Fire Training Facility and other local training facilities for decades, in and around the CWW Service Area.

27. Upon information and belief, AFFF containing PFAS has been continuously discharged at various commercial and industrial sites in and around the CWW Service Area, which has contaminated the surface water in and around the CWW Service Area.

28. The Lake Oliver Marina is located just north of the North Columbus Water Resource Facility, where raw water is withdrawn for treatment and distribution.

29. The most recent PFAS testing performed by CWW on the Columbus and Fort Moore Water Treatment Plants was done between January and May 2023, which yielded the following results:

PFAS Compound	Test Result Ranges
PFOA	2.2 ppt – 19.0 ppt
PFOS	1.8 ppt – 7.0 ppt
PFBS	<2.0 ppt – 4.5 ppt
PFHxS	<1.7 ppt – 3.1 ppt
PFHpA	<1.7 ppt – 6.2 ppt

30. Plaintiff files this lawsuit to seek abatement of an ongoing nuisance, to recover compensatory and all other damages and relief, including all necessary funds to compensate Plaintiff for the costs of investigating and remediating the contamination of surface water, impacted by PFAS; designing, constructing, installing, operating, and maintaining the treatment facilities and equipment required to remove PFAS from its public water supplies; and for such other damages and relief the Court may order.

31. At all times pertinent herein, Plaintiff did not know, nor should Plaintiff have known, of the ongoing contamination of its Property through the release, use, storage and/or disposal of Fluorosurfactant Products, like AFFF, as Defendants did not disclose the toxic nature and harmful effects of these Fluorosurfactant Products.

32. A principal purpose of this lawsuit is to hold Defendants liable for the costs the Plaintiff has incurred, and expects to incur, to clean up the surface water withdrawn from the Chattahoochee and Lake Oliver for treatment and use as drinking water contaminated by the Fluorosurfactant AFFF products manufactured by Defendants which were introduced into the stream of commerce. Such costs include all necessary funds to investigate, test, monitor, assess, evaluate, remediate, abate, or contain contamination of its surface water resources that are polluted with PFAS.

PARTIES

A. Plaintiff

33. Plaintiff, CWW, is an executive department of the Columbus Consolidated Government between the City of Columbus, Georgia and Muscogee County, with its primary address at 1421 Veterans Parkway, Columbus, Georgia 31901. CWW provides drinking water and wastewater treatment to over 200,000 residents of the Columbus, Georgia region, including Fort Moore, as well as parts of Harris and Talbot Counties (“CWW Service Area”).

B. Defendants

34. The term “Defendants” refers to all Defendants named herein jointly and severally.

35. Defendant **3M Company f/k/a Minnesota Mining and Manufacturing Co.** (“3M”) is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at 3M Center, St. Paul, MN 55144-1000.

36. Beginning before 1970 and until at least 2002, 3M designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

37. Defendant **Amerex Corporation (“Amerex”)** is a corporation organized and existing under the laws of the State of Alabama, with its principal place of business located at 7595 Gadsden Highway, Trussville, AL 35173.

38. Amerex is a manufacturer of firefighting products. Beginning in 1971, it was a manufacturer of hand portable and wheeled extinguishers for commercial and industrial applications.

39. In 2011, Amerex acquired Solberg Scandinavian AS, one of the largest manufacturers of AFFF products in Europe.

40. On information and belief, beginning in 2011, Amerex designed, manufactured, marketed distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

41. Defendant **Perimeter Solution, LP (“Perimeter”)** is a limited partnership organized and existing under the laws of Delaware, with its principal place of business at 8000 Maryland Avenue, Suite 350, Clayton, Missouri 63105.

42. Perimeter does business throughout the United States, including conducting business throughout Georgia.

43. In 2019, Perimeter purchased the Solberg products division of Amerex.

44. Solberg manufactured, sold, and/or distributed fire safety products, including AFFF.

45. Perimeter is the successor-in-interest to Solberg.

46. Perimeter manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including Georgia.

47. Defendant **Raytheon Technologies Corporation** (“Raytheon”) is a corporation organized and existing under the laws of Delaware, with its principal place of business at 10 Farm Springs Road, Farmington, Connecticut 06032.

48. Raytheon conducts business throughout the United States, including throughout Georgia.

49. Upon information and belief, United Technologies Corporation merged with Raytheon Company to form Raytheon Technologies in or around April 2020.

50. Raytheon was formerly known as United Technologies Corporation until in or around April 2020.

51. Raytheon manufactured, sold, marketed, and/or distributed AFFF throughout Georgia.

52. Defendant **UTC Fire & Security Americas Corporation, Inc** (“UTC”) is a Delaware corporation with its principal place of business at 13995 Pasteur Boulevard, Palm Beach Gardens, Florida 33418.

53. Upon information and belief, UTC was a division of United Technologies Corporation.

54. UTC manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including Georgia.

55. In April 2005, United Technologies Corporation acquired Kidde plc from the public market. From 2000 to 2005, United Technologies Corporation was the parent company of Kidde-Fenwal, Inc.

56. Following United Technologies Corporation's acquisition of Kidde plc, United Technologies Corporation combined Kidde's plc's firefighting business with that of Chubb plc, an affiliate of Defendant Chubb Fire, Ltd., which United Technologies Corporation acquired in 2003.

57. Chubb Fire, Ltd. was a corporate affiliate of Kidde Fenwal, Inc. during the period when it sold AFFF.

58. Defendant **Carrier Global Corporation ("Carrier")** is a corporation organized under the laws of the State of Delaware, with its principal place of business at 13995 Pasteur Boulevard, Palm Beach Gardens, FL 33418.

59. Carrier manufactured, sold, marketed, and/or distributed AFFF through its many divisions and brands, including but not limited to Kidde and UTC.

60. On information and belief, Carrier was formed in March 2020 when United Technologies Corporation spun off its fire and security business before it merged with Raytheon Company in April 2020.

61. On information and belief, Kidde-Fenwal became a subsidiary of Carrier when United Technologies Corporation spun off its fire and security business in March 2020.

62. On information and belief, the AFFF Defendants designed, manufactured, marketed, distributed, and sold AFFF products containing PFOS, PFOA, and/or their chemical precursors.

63. Defendant **Buckeye Fire Equipment Company ("Buckeye")** is a corporation organized under the laws of the State of Ohio, with its principal place of business located at 110 Kings Road, Kings Mountain, NC 28086.

64. On information and belief, Buckeye designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOA and PFOS.

65. Defendant **National Foam, Inc.** (“National Foam”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 141 Junny Road, Angier, NC 27501.

66. Beginning in or around 1973, National Foam designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

67. On information and belief, National Foam currently manufactures the Angus brand of AFFF products and is a subsidiary of Angus International Safety Group, a United Kingdom private limited company.

68. Defendant **Angus Fire Armour Corporation** (“Angus Fire”) is a corporation organized and existing under the laws of Delaware, with its principal place of business at 141 Junny Road, Angier, North Carolina 27501.

69. Angus Fire manufactured, sold, marketed, and/or distributed AFFF and has done business throughout the United States, including Georgia.

70. On information and belief, National Foam merged with Chubb Fire Ltd. to form Chubb National Foam, Inc. in or around 1988.

71. On information and belief, Chubb (defined below) is or has been composed of different subsidiaries and/or divisions, including but not limited to, Chubb Fire & Security Ltd., Chubb Security, PLC, Red Hawk Fire & Security, LLC, and/or Chubb National Foam, Inc. (collectively, “Chubb”).

72. On information and belief, Chubb was acquired by Williams Holdings in 1997.

73. On information and belief, Angus Fire Armour Corporation had previously been acquired by Williams Holdings in 1994.

74. On information and belief, Williams Holdings was demerged into Chubb and Kidde P.L.C. in or around 2000.

75. On information and belief, when Williams Holdings was demerged, Kidde P.L.C. became the successor in interest to National Foam System, Inc. and Angus Fire Armour Corporation.

76. On information and belief, Kidde P.L.C. was acquired by United Technologies Corporation in or around 2005.

77. On information and belief, Angus Fire Armour Corporation and National Foam separated from United Technologies Corporation in or around 2013.

78. Defendant **Royal Chemical Company, Ltd.** (“Royal Chemical”) is a corporation organized and existing under the laws of Ohio, with its principal place of business at 8679 South Freeway Drive, Macedonia, Ohio 44056.

79. Royal Chemical manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including Georgia.

80. Defendant **Verde Environmental, Inc.** a/k/a Micro-Blaze, Inc. (“Verde”) is a corporation organized and existing under the laws of Delaware, with its principal place of business at 9223 Eastex Fairway, Houston, Texas 77093.

81. Verde does business throughout the United States, including Georgia.

82. Verde manufactured, sold, marketed, and/or distributed AFFF throughout Georgia.

83. Defendant **Chemguard, Inc.** (“Chemguard”) is a corporation organized under the laws of the State of Texas, with its principal place of business located at One Stanton Street, Marinette, WI 54143.

84. On information and belief, Chemguard designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOA and PFOS.

85. In 2003, Chemguard acquired the Ciba-Geigy Corporation's fluorosurfactants business.

86. On information and belief, Chemguard was acquired by Tyco International Ltd. in 2011.

87. On information and belief, Tyco International Ltd. later merged into its subsidiary Tyco International plc in 2014 to change its jurisdiction of incorporation from Switzerland to Ireland.

88. Defendant **Tyco Fire Products LP** ("Tyco") is a limited partnership organized under the laws of the State of Delaware, with its principal place of business located at 1400 Pennbrook Parkway Lansdale, Pennsylvania 19446.

89. Tyco is the successor in interest of The Ansul Company ("Ansul"), having acquired Ansul in 1990.

90. Beginning in or around 1975, Ansul designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

91. After Tyco acquired Ansul in 1990, Tyco/Ansul continued to design, manufacture, market, distribute, and sell AFFF products containing PFAS, including but not limited to PFOA and PFOS.

92. Defendant **Arkema Inc.** is a corporation organized and existing under the laws of Pennsylvania, with its principal place of business at 900 First Avenue, King of Prussia, PA 19406.

93. Arkema Inc. develops specialty chemicals and polymers.

94. Arkema, Inc. is an operating subsidiary of Arkema France, S.A.

95. On information and belief, Arkema Inc. designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

96. Defendant **BASF Corporation** (“BASF”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 100 Park Avenue, Florham Park, NJ 07932.

97. On information and belief, BASF is the successor-in-interest to Ciba. Inc. (f/k/a Ciba Specialty Chemicals Corporation).

98. On information and belief, Ciba Inc. designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

99. Defendant **ChemDesign Products, Inc.** (“ChemDesign”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 2 Stanton Street, Marinette, WI 54143.

100. On information and belief, ChemDesign designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

101. Defendant **Deepwater Chemicals, Inc.** (“Deepwater”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 196122 E County Road 40, Woodward, OK 73801.

102. On information and belief, Deepwater designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

103. Defendant **Daikin America, Inc.** (“Daikin”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 20 Olympic Drive, Orangeburg, New York 10962.

104. Daikin manufactured, sold, marketed, and/or distributed AFFF or fluorsurfactants used in the manufacture of AFFF throughout the United States, including Georgia.

105. Defendant **Dynax Corporation** (“Dynax”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 103 Fairview Park Drive, Elmsford, NY 10523.

106. On information and belief, Dynax entered into the AFFF market on or about 1991 and quickly became a leading global producer of fluorosurfactants and fluorochemical stabilizers containing PFOS, PFOA, and/or their chemical precursors.

107. On information and belief, Dynax designed, manufactured, marketed, distributed, and sold fluorosurfactants and fluorochemical stabilizers containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

108. Defendant **E.I. du Pont de Nemours & Company** (“Old DuPont”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 974 Centre Road, Wilmington, DE 19805.

109. Defendant **The Chemours Company** (“Chemours Co.”) is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, P.O. Box 2047, Wilmington, DE 19899.

110. In 2015, DuPont spun off its performance chemicals business to Chemours Co., along with vast environmental liabilities which Chemours Co. assumed, including those related to PFOS and PFOA and fluorosurfactants. On information and belief, Chemours Co. has supplied fluorosurfactants containing PFOS and PFOA, and/or their chemical precursors to manufacturers of AFFF products.

111. On information and belief, Chemours Co. was incorporated as a subsidiary of DuPont as of April 30, 2015. From that time until July 2015, Chemours Co. was a wholly owned subsidiary of DuPont.

112. In July 2015, DuPont spun off Chemours Co. and transferred to Chemours Co. its “performance chemicals” business line, which includes its fluoroproducts business, distributing shares of Chemours Co. stock to DuPont stockholders, and Chemours Co. has since been an independent, publicly traded company.

113. Defendant **The Chemours Company FC, LLC** (“Chemours FC”) is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, Wilmington, DE 19899.

114. Defendant **Corteva, Inc.** (“Corteva”) is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 974 Centre Rd., Wilmington, DE 19805.

115. Defendant **Dupont de Nemours Inc. f/k/a DowDuPont, Inc.** (“Dupont de Nemours, Inc.”) is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 974 Centre Road, Wilmington, DE 19805 and 2211 H.H. Dow Way, Midland, MI 48674.

116. On June 1, 2019, DowDuPont separated its agriculture business through the spin-off of Corteva.

117. Corteva was initially formed in February 2018. From that time until June 1, 2019, Corteva was a wholly owned subsidiary of DowDuPont.

118. On June 1, 2019, DowDuPont distributed to DowDuPont stockholders all issued and outstanding shares of Corteva common stock by way of a pro-rata dividend. Following that distribution, Corteva became the direct parent of E. I. Du Pont de Nemours & Co.

119. Corteva holds certain DowDuPont assets and liabilities, including DowDuPont's agriculture and nutritional businesses.

120. On June 1, 2019, DowDuPont, the surviving entity after the spin-off of Corteva and of another entity known as Dow, Inc., changed its name to DuPont de Nemours, Inc., to be known as DuPont ("New DuPont"). New DuPont retained assets in the specialty products business lines following the above-described spin-offs, as well as the balance of the financial assets and liabilities of E.I DuPont not assumed by Corteva.

121. Defendants E. I. Du Pont de Nemours and Company; The Chemours Company; The Chemours Company FC, LLC; Corteva, Inc.; and DuPont de Nemours, Inc. are collectively referred to as "DuPont" or the "DuPont Defendants" throughout this Complaint.

122. On information and belief, DuPont designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

123. On information and belief, 3M and Chemguard also designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

124. On information and belief, the Fluorosurfactant Defendants designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

125. Defendant **AGC Chemicals Americas, Inc.** (“AGC”) is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 55 East Uwchlan Avenue, Suite 201, Exton, PA 19341.

126. On information and belief, AGC was formed in 2004 and is a subsidiary of AGC Inc., a foreign corporation organized under the laws of Japan, with its a principal place of business in Tokyo, Japan.

127. AGC manufactures specialty chemicals. It offers glass, electronic displays, and chemical products, including resins, water and oil repellants, greenhouse films, silica additives, and various fluorointermediates.

128. On information and belief, AGC designed, manufactured, marketed, distributed, and sold PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

129. Defendant **Archroma U.S., Inc.** (“Archroma”) is a corporation organized and existing under the laws of the State of Delaware, with its a principal place of business at 5435 77 Center Drive, Charlotte, NC 28217.

130. On information and belief, Archroma was formed in 2013 when Clariant Corporation divested its textile chemicals, paper specialties, and emulsions business to SK Capital Partners.

131. On information and belief, Archroma designed, manufactured, marketed, distributed, and sold PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

132. Defendant **Chemicals, Inc.** is a corporation organized and existing under the laws of Texas, with its principal place of business located at 12321 Hatcherville, Baytown, TX 77520.

133. On information and belief, Chemicals, Inc. supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

134. Defendant **Clariant Corporation** (“Clariant”) is a corporation organized and existing under the laws of New York, with its principal place of business at 4000 Monroe Road, Charlotte, NC 28205.

135. On information and belief, Clariant is the successor in interest to the specialty chemicals business of Sandoz Chemical Corporation (“Sandoz”). On information and belief, Sandoz spun off its specialty chemicals business to form Clariant in 1995.

136. On information and belief, Clariant supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

137. Defendant **Nation Ford Chemical Co.** (“Nation Ford”) is a corporation organized and existing under the laws of South Carolina, with its principal place of business located at 2300 Banks Street, Fort Mill, SC 29715.

138. On information and belief, Nation Ford supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

139. On information and belief, 3M, ChemDesign, Deepwater, and DuPont also supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

140. Specifically, from 1951, Old DuPont, and on information and belief, Chemours, designed, manufactured, marketed, and sold fluorosurfactant products, including Teflon nonstick cookware, and more recently PFAS feedstocks, such as Forafac 1157N, for the use in the manufacture of AFFF products.

141. Based on information and belief, by no later than 2001, Old DuPont manufactured, produced, marketed, and sold fluorosurfactant products and/or PFAS feedstocks containing or degrading into PFOA to some or all of the AFFF product manufacturers for use in their AFFF products that were discharged into the environment and contaminated Plaintiff's property.

142. Defendant **Honeywell International, Inc.** ("Honeywell International") is a Delaware corporation with its principal place of business located at 855 South Mint Street, Charlotte, North Carolina 28202.

143. Honeywell International manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including in Georgia.

144. Defendant **Honeywell Safety Products USA, Inc.** ("Honeywell Safety") is a Delaware corporation with its principal place of business located at 855 South Mint Street, Charlotte, North Carolina 28202.

145. Honeywell Safety manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including in Georgia.

146. Honeywell Safety is a wholly owned subsidiary of Honeywell International.

147. On information and belief, the PFC Defendants supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

148. Defendant **Mine Safety Appliances Company, LLC** (“Mine Safety”) is a Pennsylvania limited liability company with a principal place of business located at 1000 Cranberry Woods Drive, Cranberry Township, Pennsylvania 16066.

149. Mine Safety manufactured, sold, or distributed AFFF throughout the United States, including Georgia.

150. Doe Defendants 1-20 are unidentified entities or persons whose names are presently unknown and whose actions, activities, omissions (a) may have permitted, caused and/or contributed to the contamination of Plaintiff’s water sources; or (b) may be vicariously responsible for entities or persons who permitted, caused and/or contributed to the contamination of Plaintiff’s water sources; or (c) may be successors in interest to entities or persons who permitted, caused and/or permitted, contributed to the contamination of Plaintiff’s water sources. After reasonable search and investigation to ascertain the Doe Defendants’ actual names, Doe Defendants’ actual identities are unknown to Plaintiff as they are not linked with any Defendants on any public source.

151. Doe Defendants 1-20, either in their own capacity or through a party they are liable for: (1) designed, manufactured, marketed, distributed, and/or sold AFFF products containing PFOS, PFOA, and/or their chemical precursors, and/or designed, manufactured, marketed, distributed, and/or sold the fluorosurfactants contained in AFFF/Component Products; or (2) used, handled, transported, stored, discharged, disposed of, designed, manufactured, marketed, distributed, and/or sold PFOS, PFOA, and/or their chemical precursors, or other non-AFFF products containing PFOS, PFOA, and/or their chemical precursors; or (3) failed to timely perform

necessary and reasonable response and remedial measures to releases of PFOS, PFOA, and/or their chemical precursors, or other non-AFFF products containing PFOS, PFOA, and/or their chemical precursors in to the environment in which Plaintiff's water supplies exist.

152. Defendants, at all times material herein, acted by and through their respective agents, servants, officers and employees, actual or ostensible, who then and there were acting with within the course and scope of their actual or apparent agency, authority or duties. Defendants are liable based on such activities, directly and vicariously.

153. Defendants represent all or substantially all of the market for AFFF/Fluorosurfactant Products in and around the CWW Service Area.

JURISDICTION AND VENUE

154. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1332(a) because complete diversity exists between Plaintiff and Defendants and the amount in controversy exceeds \$75,000.00.

155. Plaintiff is filing this complaint as permitted by Case Management Order No. 3 ("CMO 3") issued by Judge Richard M. Gergel of this Court. Pursuant to CMO 3, Plaintiff designates the United States District Court for the Middle District of Georgia, Columbus Division as the "home venue" where Plaintiff would have otherwise filed suit pursuant to 28 U.S.C. § 1391. But for CMO 3, venue is proper in the United States District Court for the Middle District of Georgia, Columbus Division in that the events or omissions giving rise to the claim occurred in that district. Plaintiff respectfully requests that, at the time of transfer of this action back to district court for further proceedings, this case be transferred to the United States District Court for the Middle District of Georgia.

156. The United States District Court for the Middle District of Georgia has personal jurisdiction over the Defendants because at all times relevant to this lawsuit, the Defendants manufactured, designed, marketed, distributed, released, promoted and/or otherwise sold (directly or indirectly) Fluorosurfactant Products, including AFFF, to various locations, such that each Defendant knew or should have known that said products would be delivered to the State of Georgia. Therefore, the exercise of jurisdiction over the Defendants by the United States District Court for the Middle District of Georgia does not offend traditional notions of fair play and substantial justice.

FACTUAL ALLEGATIONS RELEVANT TO ALL CAUSES OF ACTION

A. Manufacture and Use of Aqueous Film-Forming Foam (“AFFF”)

157. AFFF formulations are chemical mixtures used to extinguish hydrocarbon fuel-based fires.

158. AFFF containing fluorinated surfactants have a better firefighting capability than plain water due to their surface-tension lowering properties- essentially smothering the fire and starving it of its oxygen.

159. However, some fluorinated surfactants have unique properties that cause some of the compounds to not biodegrade and to bioaccumulate and are toxic to animals and humans.

160. AFFF is a Class-B firefighting foam. It is mixed with water and used to extinguish fires that are difficult to fight, particularly those that involve petroleum or other flammable liquids.

161. AFFF was introduced commercially in the mid-1960s and rapidly became the primary firefighting foam in the U.S. and in many parts of the world.

162. AFFF is synthetically formed by combining fluorine free hydrocarbon foaming agents with surfactants. When mixed with water, the resulting solution produces an aqueous film

that spreads across the surface of hydrocarbon fuel. This film provides fire extinguishment and is the source of the designation aqueous film forming foam.

163. When used as the Defendants intended and directed, Defendants' AFFF releases PFOA, PFOS, PFBS, and/or their precursor chemicals into the environment.

164. Defendants manufacture products that contain fluorocarbon surfactants believed to include PFOS, PFOA, and/or certain other PFCs that degrade into PFAS.

165. PFCs are manmade chemicals that do not exist in nature.

166. In the foam industry, concentrates are typically referred to as "3%" or "6%" concentrate, depending on the mixture rate with water. AFFF concentrates contain about 60-90% water and have a fluorine content of about 0.3 – 1.8%.

167. Defendants 3M, Tyco/Ansul, National Foam, Chemguard and Buckeye designed, manufactured, and sold AFFF that was used in and around the CWW Service Area, including, but not limited to, National Foam's AER-O-Foam XL-3 3%, used in training operations and for emergency fire-fighting situations.

168. PFCs used in 3M's AFFF were produced by a unique and patented process known as electrochemical fluorination ("ECF"). The ECF process resulted in a product that contains PFOS, some of which degrades into PFOA.

169. 3M was the only company to manufacture PFOS-containing AFFF.

170. In an attempt to limit liability, 3M opted to stop producing PFOS 2002 because it was aware of the looming chemical exposure and health effects on the public.

171. Similarly, PFOA is a man-made, manufactured chemical not found in nature. PFOA was used to make household and commercial products that resist heat and chemical reactions, and has many uses, including repelling oil, stains, grease, and water.

172. In 1947, 3M began producing PFOA via ECF.

173. In 1951, 3M began selling its PFOA to other chemical companies, including DuPont.

174. All other Defendants except 3M manufactured fluorosurfactants for use in AFFF through the process of telomeritization and/or manufactured AFFF containing fluorosurfactants manufactured through the process of telomerization. Telomerization produces fluorotelomers, including PFOA and/or the chemical precursors to PFOA.

175. For instance, other companies, such as Defendants Tyco/Ansul, Buckeye, National Foam, and Chemguard began manufacturing AFFF using PFOA that they produced themselves or purchased from other companies. Defendants' AFFF was then for use at airports, fire departments, and industrial facilities across the nation.

176. The chemical structure of PFAS makes them resistant to breakdown or environmental degradation. As a result, they are persistent when released into the environment. Some PFAS, such as PFOS and PFOA, have been found to bioaccumulate in humans and animals. In 2005, the U.S. Department of Health and Human Services found that "human exposure to PFOA and PFOS lead to the buildup of these chemicals in the body."

177. AFFF can be made without PFOA, PFOS, PFBS, or their precursor chemicals.

178. By at least the end of the 1960s, additional research and testing performed by 3M and DuPont Chemical Solutions Enterprise indicated that such materials, including at least PFOA, because of their unique chemical structure, were resistant to environmental degradation and would persist in the environment essentially unaltered if allowed to enter the environment.

179. Early studies showed that PFC's accumulated in the human body and were "toxic." 3M studies from the 1970s concluded that PFC's were "even more toxic" than previously believed.

180. In 1976, 3M found PFOA was persistent in the blood of its workers. This should have alerted 3M to the same issue raised by findings regarding PFOS in the prior year. 3M communicated its findings to DuPont Chemical Solutions Enterprise, but not to industry regulatory agencies.

181. Upon information and belief, by the 1970's, 3M and DuPont Chemical Solutions Enterprise knew that their PFC's (PFOA and PFOS) were widely present in the blood of the general U.S. population and would accumulate and build up in the blood/body of the exposed individuals with each additional exposure. Upon information and belief, 3M and DuPont Chemical Solutions Enterprise concealed this knowledge from the public and government regulators.

182. In or about 1977, Tyco/Ansul was also aware of the environmental and toxic concerns of its AFFF and undertook a study and investigation on more environmentally improved AFFF.

183. By at least the end of the 1980s, additional research and testing performed by Defendants manufacturing and/or using PFAS materials, including at least 3M and DuPont Chemical Solutions Enterprise, indicated that elevated incidence of certain cancers and other adverse health effects, including elevated liver enzymes and birth defects, had been observed among workers exposed to such materials, including at least PFOA, but such data was not published, provided to governmental entities as required by law, or otherwise publicly disclosed at the time.

184. By at least the end of the 1990s, additional research and testing performed by Defendants manufacturing and/or using PFAS materials, including at least 3M and DuPont Chemical Solutions Enterprise, indicated that at least one such PFAS material, PFOA, had caused

a triad of tumors (Leydig cell (testicular), liver and pancreatic) in a second chronic cancer study in rats.

185. PFAS are readily absorbed after consumption, inhalation or dermal absorption, and it accumulates primarily in the blood stream, kidney, and liver.

186. Because of its toxicity, eight major PFOA manufacturers agreed in 2006 to participate in the EPA's PFOA Stewardship Program. The participating companies made voluntary commitments to reduce product content and facility emissions of PFOA and related chemicals by 95%, no later than 2010.

187. PFOA can remain in the environment, particularly in water, for many years and can move through air, soil, and into surface water and groundwater.

188. Human studies show associations between increased PFOA levels in blood and an increased risk of several health conditions, including high cholesterol levels, changes in thyroid hormone, ulcerative colitis (autoimmune disease), pre-eclampsia (a complication of pregnancy that includes high blood pressure), and kidney and testicular cancer.

189. These injuries can arise months or years after exposure to PFOA.

190. According to the EPA's Lifetime HAs, the adverse health effects observed following exposure to PFOS are the same as those observed with PFOA, meaning injuries associated with PFOS exposure and accumulation similarly manifest themselves months or years after initial exposure.

191. Due to the extreme persistence of PFAS in the environment, these chemicals' toxicity, mobility, and bioaccumulation potential pose ongoing and probable adverse effects to human health and the environment.

B. Health Advisories and Health Effects relating to PFOS and PFOA

192. Many parties have studied PFOS and PFOA, sometimes referred to as C8, including a Science Panel formed out of a class action settlement arising from contamination from DuPont's Washington Works located in Wood County, West Virginia.

193. The C8 panel consisted of three epidemiologists specifically tasked with determining whether there was a probable link between PFOA exposure and human diseases. In 2012, the panel found probable links between PFOA and kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy induced hypertension (including preeclampsia), and hypercholesterolemia.

194. The non-cancer health effects of PFOS are the same as PFOA.

195. In the May 2015 "Madrid Statement on Poly- and Perfluoroalkyl Substances (PFAS's)," scientists and other professionals from a variety of disciplines, concerned about the production and release into the environment of PFOA, called for greater regulation, restrictions, limits on the manufacture and handling of any PFOA containing product, and to develop safe non-fluorinated alternatives to these products to avoid long-term harm to human health and the environment.¹

196. On May 25, 2016, the EPA released a lifetime health advisory (HAs) and health effects support documents for PFOS and PFOA.² The EPA developed the HAs to assist governmental officials in protecting public health when PFOS and PFOA are present in drinking water. The EPA HAs identified the concentration of PFOS and PFOA in drinking water at or below

¹ Blum A, Balan SA, Scheringer M, Trier X, Goldenman G, Cousins IT, Diamond M, Fletcher T, Higgins C, Lindeman AE, Peaslee G, de Voogt P, Wang Z, Weber R. 2015. The Madrid statement on poly- and perfluoroalkyl substances (PFASs). *Environ Health Perspect* 123:A107–A111; <http://dx.doi.org/10.1289/ehp.1509934>.

² See Fed. Register, Vol. 81, No. 101, May 25, 2016, Lifetime Health Advisories and Health Effects Support Documents for Perfluorooctanoic Acid and Perfluorooctane Sulfonate.

which adverse health effects are not anticipated to occur over a lifetime of exposure at 0.07 ppb or 70 ppt. The HAs were based on peer-reviewed studies of the effects of PFOS and PFOA on laboratory animals (rats and mice) and were also informed by epidemiological studies of human populations exposed to PFOSs. These studies indicate that exposure to PFOS and PFOA over these levels may result in adverse health effects, including:

- a. Developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations);
- b. Cancer (testicular and kidney);
- c. Liver effects (tissue damage);
- d. Immune effects (e.g., antibody production and immunity); and/or
- e. Thyroid disease and other effects (e.g., cholesterol changes).

197. Many states, however, have issued lower regulatory limits. For example, Vermont has set a combined level of 20 ppt for PFOA and PFOS and New Jersey has set a maximum contaminant level (“MCL”) of 14 ppt for PFOA.

198. In addition, PFOS and PFOA are hazardous materials because they pose a “present or potential threat to human health.”³

199. On May 2, 2012, the EPA published its Third Unregulated Contaminant Monitoring Rule (“UCMR3”), requiring public water systems nationwide to monitor for thirty contaminants of concern between 2013 and 2015. PFOS and PFOA are such contaminants.⁴

³ *Id*; see also, *National Ass'n for Surface Finishing v. EPA*, 795 F.3d 1, 3, 6 (D.C. Cir. 2015) (referring to PFOS as a “toxic compound” and a “hazardous chemical.”).

⁴ See *Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR 3) for Public Water Systems*, 77 Fed. Reg. 26072 (May 2, 2012).

200. In 2016, the National Toxicology Program of the United States Department of Health and Human Services (“NTP”) and the International Agency for Research on Cancer (“IARC”) both released extensive analyses of the expanding body of research regarding the adverse effects of PFCs. The NTP concluded that both PFOA and PFOS are “presumed to be an immune hazard to humans” based on a “consistent pattern of findings” of adverse immune effects in human (epidemiology) studies and “high confidence” that PFOA and PFOS exposure was associated with suppression of immune responses in animal (toxicology) studies.⁵

201. The IARC concluded that there is “evidence” of “the carcinogenicity of . . . PFOA” in humans and in experimental animals, meaning that “[a] positive association has been observed between exposure to the agent and cancer for which a causal interpretation is . . . credible.”⁶

202. California has listed PFOA and PFOS to its Proposition 65 list as a chemical known to cause reproductive toxicity under the Safe Drinking Water and Toxic Enforcement Act of 1986.

203. The United States Senate and House of Representatives passed the National Defense Authorization Act in November 2017, which included \$42 Million to remediate PFC contamination from military bases, as well as devoting \$7 Million toward the Investing in Testing Act, which authorizes the Center for Disease Control and Prevention (“CDC”) to conduct a study into the long-term health effects of PFOA and PFOS exposure.

⁵ See U.S. Dep’t of Health and Human Services, Nat’l Toxicology Program, *NTP Monograph: Immunotoxicity Associated with Exposure to Perfluorooctanoic Acid or Perfluorooctane Sulfonate* (Sept. 2016), at 1, 17, 19, https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf.

⁶ See Int’l Agency for Research on Cancer, IARC Monographs: *Some Chemicals Used as Solvents and in Polymer Manufacture* (Dec. 2016), at 27, 97, <http://monographs.iarc.fr/ENG/Monographs/vol110/mono110.pdf>.

204. In June 2018, the Agency for Toxic Substances and Disease Registry (“ATSDR”) and EPA released a draft toxicological profile for PFOS and PFOA and recommended the drinking water advisory levels be lowered to 11 ppt for PFOA and 7 ppt for PFOS.

205. On June 15, 2022, the EPA released four drinking water health advisories for PFAS (that replace those that the EPA issued in 2016):⁷

- a. Interim updated health advisory for PFOA = .004 ppt
- b. Interim updated health advisory for PFOS = .02 ppt
- c. Final health advisory for GenX chemicals = 10 ppt
- d. Final health advisory for PFBS = 2,000 ppt

206. On September 6, 2022, the EPA published a notice of proposed rulemaking seeking public comment on its plan to designate PFOS and PFOA as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”).⁸

207. On March 14, 2023, the EPA announced the proposed National Primary Drinking Water Regulation (“NPDWR”) for six PFAS (PFOS, PFOA, PFHxS, GenX chemicals, PFNA, AND PFBS).⁹ The NPDWR set a proposed MCL at 4.0 ppt.¹⁰ EPA anticipates finalizing the regulation by the end of 2023.¹¹

⁷ See “Technical Fact Sheet: Drinking Water Health Advisories for Four PFAS (PFOA, PFOS, GenX chemicals, and PFBS),” EPA 822-F-22-002, available at <https://www.epa.gov/newsreleases/epa-announces-new-drinking-water-health-advisories-pfas-chemicals-1-billion-bipartisan> (last visited June 16, 2023).

⁸ See Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances, 87 Fed. Reg. 54415 (Sept. 6, 2022).

⁹ EPA, National Primary Drinking Water Regulations, *available at* <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulation-table> (last visited June 16, 2023).

¹⁰ *Id.*

¹¹ *Id.*

208. In addition to establishing an MCL, the aforementioned EPA proposed regulation will require water systems in the United States to monitor for the six PFAS quarterly, notify the public if monitoring detects PFAS at levels above the MCL, and, if above the MCL, take action to reduce PFAS levels in drinking water (e.g., utilize treatment options or switch to an alternative water supply that is below the MCL).¹²

C. Defendants' Knowledge of the Threats to Public Health and the Environment Posed by PFAS and PFOA

209. Old Dupont had been studying the potential toxicity of PFOA since at least the 1960s and knew it was contaminating drinking water drawn from the Ohio River and did not disclose to the public or to government regulators what they knew about the substance's potential effects on humans, animals, or the environment.¹³

210. On information and belief, by at least the 1970s Defendants knew or should have known, among other things, that (a) PFOA and PFOS are toxic; and (b) when sprayed in the open environment per the instructions given by the manufacturer, PFOA, PFOS and other PFAS are mobile and persistent, readily migrate through the subsurface, mix easily with groundwater, resist natural degradation, render drinking water unsafe and/or non-potable, and can be removed from public drinking water supplies only at substantial expense.

211. Upon information and belief, Defendants concealed from the public and government agencies its knowledge of the risk of harm posed by PFAS.

¹² *Id.*

¹³ See, e.g., Fred Biddle, "DuPont confronted over chemical's safety," *Wilmington News Journal* (Apr. 13, 2003). The *Wilmington News Journal* is published in Wilmington, Ohio.

212. In 1975, Defendant 3M concluded that PFOS was present in the blood of the general population. Since PFOA and PFOS are not naturally occurring, this finding should have alerted 3M and the other Defendant manufacturers to the possibility that their products were a source of this PFOS. The finding also should have alerted 3M to the possibility that PFOS might be mobile, persistent, bioaccumulative, and biomagnifying, as those characteristics could explain the absorption of PFOS in blood from 3M's products.

213. In 1976, Defendant 3M found PFOA in the blood of its workers. This finding should have alerted 3M and the other Defendant manufacturers to the same issues raised by the findings regarding PFOS in the prior year.

214. A 1978 study by 3M showed that PFOA reduced the survival rate of fathead minnow fish eggs.

215. Other studies by 3M in 1978 showed that PFOS and PFOA are toxic to rats, and that PFOS is toxic to monkeys. In one study in 1978, all monkeys died within the first few days of being given food contaminated with PFOS.

216. Studies by 3M after the 1970s also showed adverse effects from exposure to PFOA and PFOS.

217. In a 1983 study, for example, 3M found that PFOS caused the growth of cancerous tumors in rats.

218. A study proposal by 3M in 1983 stated that the resistance to degradation of PFOS and PFOA made them “potential candidates for environmental regulations, including further testing requirements under laws such as the Toxic Substances Control Act.” 3M Environmental Laboratory (EE & PC), Fate of Fluorochemicals - Phase II, at p.6 (E. A. Reiner, ed. May 20, 1983).

219. A 1997 material safety data sheet (“MSDS”) for a non-AFFF product made by 3M listed its only ingredients as water, PFOA, and other per-fluoroalkyl substances and warned that the product includes “a chemical which can cause cancer.” The MSDS cited “1983 and 1993 studies conducted jointly by 3M and DuPont” as support for this statement. On information and belief, 3M's MSDSs for AFFF did not provide similar warnings.

220. Federal law requires chemical manufacturers and distributors to immediately notify the EPA if they have information that “reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment.” Toxic Substances Control Act (“TSCA”) § 8(e), 15 U.S.C. § 2607(e).

221. 3M did not comply with its duty under TSCA, and in April 2006 it agreed to pay EPA a penalty of more than \$1.5 million for its failure to disclose studies regarding PFOS or PFOA and other per-fluoroalkyl substances dating back decades, among other things.

222. By December 2005, the EPA uncovered evidence that DuPont concealed the environmental and health effects of PFOA, and the EPA announced the “Largest Environmental Administrative Penalty in Agency History.”¹⁴ The EPA fined DuPont for violating the Toxic Substances Control Act “Section 8(e)—the requirement that companies report to the EPA. substantial risk information about chemicals they manufacture, process or distribute in commerce.”¹⁵

¹⁴ U.S. Env'tl. Prot. Agency, Reference News Release, “EPA Settles PFOA Case Against DuPont for Largest Environmental Administrative Penalty in Agency History” (Dec. 14, 2005), *available at*

[https://www.epa.gov/archive/epapages/newsroom_archive/newsreleases/fdcb2f665cac66bb852570d7005d6665.html#:~:text=\(Washington%2C%20D.C.%2DDec.,to%20comply%20with%20federal%20law.](https://www.epa.gov/archive/epapages/newsroom_archive/newsreleases/fdcb2f665cac66bb852570d7005d6665.html#:~:text=(Washington%2C%20D.C.%2DDec.,to%20comply%20with%20federal%20law.) (last visited June 16, 2023).

¹⁵ *Id.*

223. By July 2011, Old DuPont could no longer credibly dispute the human toxicity of PFOA, which it continued to manufacture. The “C8 Science Panel” created as part of the settlement of a class action over Old DuPont’s releases from the Washington Works plant had reviewed the available scientific evidence and notified Old DuPont of a “probable link” between PFOA exposure and the serious (and potentially fatal) conditions of pregnancy-induced hypertension and preeclampsia.¹⁶ By October 2012, the C8 Science Panel had notified Old DuPont of a probable link between PFOA and five other conditions—high cholesterol, kidney cancer, thyroid disease, testicular cancer, and ulcerative colitis.

224. In July 2015, Old DuPont spun off its chemicals division by creating Chemours as a new publicly-traded company, once wholly owned by Old DuPont. By mid-2015, Old DuPont had dumped its perfluorinated chemical liabilities into the lap of the new Chemours.

225. On information and belief, all Defendants knew or should have known that in its intended and/or common use, AFFF containing PFOA or PFOS would very likely injure and/or threaten public health and the environment. On information and belief, this knowledge was accessible to all defendants. For example, in 1970 a well-established firefighting trade association was alerted to the toxic effects on fish of a chemical compound related to PFOS. On information and belief, at least the following Defendants are and/or were members of this trade association: 3M, Tyco/Ansul, Chemguard, and National Foam/Angus.

226. Additionally, on information and belief, all Defendants knew or should have known that their AFFF and/or chemical feedstocks and the PFOA and PFOS the products contained, easily

¹⁶ See The C8 Science Panel, Status Report: PFOA (C8) exposure and pregnancy outcome among participants in the C8 Health Project (July 15, 2011), *available at* http://www.c8sciencepanel.org/pdfs/Status_Report_C8_and_pregnancy_outcome_15July2011.pdf (last visited June 16, 2023).

dissolve in water, because the products were designed to be mixed with water; are mobile, because the products were designed to quickly form a thin film; resist degradation, because that is the nature of the products' chemical composition, and on information and belief the products had long shelf-lives; and tend to bioaccumulate, because studies regarding the presence of substances with carbon-fluorine bonds in the blood of the general population were publicly available beginning in at least 1976.

227. The Defendants failed to warn and share information with their customers regarding the danger of their products to the quality of unprotected water sources.

228. Defendants' products created major waste management problems which they absolved themselves of, providing their customers with no practical guidance and instructions on how to deal with Fluorosurfactant Product, specifically AFFF, waste.

229. Some or all of the Defendants understood how stable the fluorinated surfactants used in their AFFF formulations are when released into the environment from the first sale to their customers, but none warned customers nor provided reasonable instruction on how to manage wastes generated from use of their products. The persistence and contaminating nature of the perfluorinated surfactant 3M made that went into its AFFF products was well understood prior to the commercial applications of these surfactants at 3M's Cottage Grove facility in Minnesota.

230. The inventor of 3M's surfactants was J. H. Simons. Simons' 1948 patent (Simons¹⁷) reports: PFCs are "non-corrosive, and of little chemical reactivity"; "do not react with any of the metals at ordinary temperatures and react only with the more chemically reactive metals such as sodium, at elevated temperatures."

¹⁷ Simons, J. H., U.S. Patent No. 2,447,717. August 24, 1948.

231. Simons reported that the surfactants that 3M specified for its AFFF do not react with other compounds or reagents due to the blanket of fluorine atoms surrounding the carbon skeleton of the molecule. These highly stable chemicals were developed to provide non-reactive solid and liquid chemicals with low surface tensions that could withstand high temperatures and would not react with highly reactive materials such as oxygen (see Simons¹⁸, Bryce¹⁹). 3M understood that the stability of the carbon-to-fluorine bonds and the lack of attraction for other chemical species prevent these surfactants from undergoing further chemical reactions or degrading under natural processes in the environment (see Simons 1950 published work²⁰).

232. Bryce, an employee of 3M, published an authoritative treatise stating “[t]his chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon.” (Bryce (1964)).

233. The thermal stability of 3M’s surfactants was understood prior to commercial production. In 1947, two researchers reported that fluorocarbon compounds did not degrade at temperatures as high as 500° C (932°F), even in the presence of catalytic materials (Grosse, et al.²¹). Simons’ patent application further discloses that the chemicals he invented were thermally stable at temperatures up to 750° C (1382° F) (see Simons (1948); Simons et al., (1949)). These chemicals are non-reactive and thermally stable due to the strength and stability of the carbon-to-

¹⁸ Simons, J. H., 1949. Fluorocarbons. *Scientific American, Inc.*, 181(5): 44-47.

¹⁹ Bryce, H. G., 1964. Industrial and Utilitarian Aspects of Fluorine Chemistry. *Fluorine Chemistry*. 5(4): 295-498.

²⁰ Simons, J. H., 1950. Fluorocarbons and Their Production. *Fluorine Chemistry*, 1(12): 401-422.

²¹ Grosse, A. V., et al., 1947. Properties of Fluorocarbons. *Industrial and Engineering Chemistry*, 39(3): 367-374. March.

fluorine bonds (Simons (1949); Bryce (1950)²²). Additional research by 3M expanded the understanding of the thermal stability of perfluorocarbon compounds. Bryce explained that the fracture of the carbon-to-carbon bonds may take place at very high temperatures from 600 to 1000° C (1112 to 1832° F) depending on the carbon chain length. He also reported that the carbon-to-fluorine bond is much stronger and can require temperatures of 1200° C (2192° F) to break (Bryce, 1964).

234. Nowhere in any Material Safety Data Sheet for any of the Defendants' products is information on the thermal stability of their surfactants disclosed. Failure to disclose knowledge of how stable the chemical ingredients in the AFFF product are to customers is a failure to warn just how indestructible the surfactant ingredients are when released to unprotected water sources and even treatment plants. The remarkable thermal stability of the surfactants used in Defendants' formulations means that there is a risk that the customer has to deal with because the surfactant ingredients are incredibly stable. The surfactant additive is so stable that it is indestructible under normal use and environmental conditions; facts which are known by AFFF chemical feedstock manufacturers and not apparent to the users of these products.

235. Defendant 3M was capable of producing a variety of perfluorinated products at its Cottage Grove facility (PFOS, PFOA, and PFBA, in addition to the salts of PFOS, PFOA, and PFBA). All of these surfactants were understood by 3M to readily dissolve in water. In 1962, testing of PFOS-based surfactants indicated that these compounds were very soluble (Guenthner, et al.²³). Numerous PFCs manufactured by 3M, including fluorocarbon carboxylic acids and

²² Bryce, T. J., 1950. Fluorocarbons - Their Properties and Wartime Development. *Fluorine Chemistry*, 1(13): 423-462.

²³ Guenther, R. A., et al., 1962. Surface Active Materials From Perfluorocarboxylic and Perfluorosulfonic Acids, 1(3): 165-168.

fluorocarbon sulfonic acids such as PFOA and PFOS readily dissolve when mixed with water (Bryce (1964)). 3M knew by 1964 that when dissolved, fluorocarbon carboxylic acids and fluorocarbon sulfonic acids dissociated to form highly stable perfluorocarboxylate and perfluorosulfonate ions (Bryce (1964)). Later studies by 3M on the adsorption and mobility of FC-95 and FC-143 (the ammonium salt of PFOA) in soils indicated very high solubility and very high mobility in soils for both compounds.²⁴

236. Defendant 3M understood from the earliest days it acquired the Simons' patents that the surfactants it commercialized had extremely limited reactivity and that the high thermal stability of the perfluorinated carbon chain inhibited degradation in the environment (Bryce, 1950). The breaking of a carbon-to-fluorine bond requires the input of large amounts of energy to overcome the chemical bond between carbon and fluorine. Chemical and physical processes occurring in nature lack sufficient energy to break carbon-to-fluorine bonds and without this input of energy, the carbon-to-fluorine bonds remain intact.

237. Bryce wrote, "This chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon" (Bryce, 1964). 3M understood the chemical stability of the carbon-to-fluorine bond; it knew that its surfactants were immune to chemical and biological degradation in soils and groundwater.

238. A 1971 internal memo by H.G. Bryce states that "the thesis that there is 'no natural sink' for fluorocarbons obviously demands some attention." Hence, 3M understood at the very

²⁴ 3M, 1978 [3MA10036129].

least that when its AFFF product was released to the environment, it would essentially never degrade.²⁵

239. In natural environments, the surfactants do not undergo degradation of the carbon-to-fluorine bonds of the perfluorinated carbon chain. The non-fluorinated, functional group of the chemical will partially degrade, yielding recalcitrant products such as PFOS, PFOA, and PFBA, which then resist further degradation. Basic weathering and degradation reactions, such as hydrolysis, occur at the non-fluorinated, functional group end of the molecule, producing the original fluorocarbon compound (Pearlson²⁶). Depending on the surfactant these reduce to PFOS, PFOA, or PFBA.

240. Defendant 3M knew that the perfluorinated components in its AFFF product(s) when released to the environment would not degrade the perfluorinated carbon structure, but would remain intact and persist (Bryce, 1950). Nearly 30 years later and after the establishment of a robust market of AFFFs using such ingredients, Defendant 3M finally got around to looking at the environmental risks its products pose. A 1979 3M study reports on its surfactant FC95, citing multiple studies on toxicity and biodegradability.²⁷ The study reports that “F-95 was found to be completely resistant to biological test conditions... it appears that waterways are the environmental sink for FC95... .”²⁸

241. A 1978 3M biodegradation study reports “... the results of the quite extensive study strongly suggests that FM3422 is likely to persist in the environment for extended period unaltered by metabolic attack.”²⁹

²⁵ 3M, 1971 [3MA02496587].

²⁶ Pearlson, W. H., 1950. Fluorocarbon Derivatives. *Fluorine Chemistry*, 1(14): 463-522.

²⁷ 3MA10066577.

²⁸ *Id.*

²⁹ 3MA00717615.

242. 3M and other defendants chose not to disclose their knowledge of the inability of their surfactants to break down in the natural environment. They failed to warn that their products can contaminate drinking water sources for many decades despite their knowledge that this was a likely outcome from the use of their products.

243. All of the Defendants are sophisticated and knowledgeable in the art and science of formulating AFFF products and/or chemical feedstocks. They understood far more about the properties of and the biodegradability of their additives than any customer. They chose not to use their knowledge to design safer products. *See* Ansul³⁰ which wrote the following about the biodegradation of AFFF: Biodegradation is a “measure of how completely a substance breaks down in the environment. The biodegradability of a chemical is expressed as a percentage determined by dividing the BOD by the COD and multiplying by 100. The chemical oxygen demand, COD, is the amount of oxygen needed to completely break a chemical down to its most oxidized state (for example: CO₂, H₂O, and HF) and is a measured analytical value. The biochemical oxygen demand, BOD, is an empirical test that measures a relative oxygen requirement. This test measures the oxygen required for the biochemical degradation of organic and inorganic material... For firefighting foams, this test is conducted for 20 days as opposed to the usual five days for other chemicals because the bacteria require a longer time to acclimate to the test solution of the foam... [b]iodegradation is the percentage ratio of BOD/COD. If that resulting number is higher than 50%, the chemical is determined to be readily biodegradable. If it is below 15%, the chemical is determined to be not biodegradable. Ansul summarized its explanation by noting: If BOD/COD > 50%, then biodegradable; If BOD/COD < 15%, then NOT biodegradable.

³⁰ Ansul Inc., Environmental Aspects of AFFF and AR-AFFF, White Paper 1017, 2003.

244. The information that Ansul published and widely distributes to its customers is both misleading and deceitful. Ansul's explanation ignores the fact that while the foam stabilizer additives biodegrade, perfluorinated surfactants do not. Dimitrov, et al.³¹ report that PFAS when present in the environment does not undergo any further chemical, microbial or photolytic degradation or breakdown. Long before Dimitrov, 3M understood this as shown by its explanation of biodegradability in a 1976 study, noting that hydrocarbon components of a perfluorinated admixture will degrade leaving behind the perfluorinated components which do not biodegrade.³² Once these substances undergo biotic or abiotic degradation, the perfluorinated moiety that remains will be PFOS. The rate of degradation to PFOS is not considered significant and over time these substances are all expected to degrade in the environment to environmentally persistent PFOS. These were facts that were known by 3M in the 1960s. These were facts that other AFFF chemical feedstock manufacturers knew or should have known; and if they didn't then they simply created their products blindly and without concern as to whether they could cause harm to unprotected water resources and place communities at risk.

245. Defendant 3M, along with Defendant Ansul and others, had intimate understanding of the poor biodegradation of their fluorochemical compounds. A 1976 study, for example, observed no biodegradation of FC-95, the potassium salt of PFOS. 3M characterized the result of the study "unsurprising" in light of the fact that "[b]iodegradation of FC 95 is improbable because it is completely fluorinated".³³

³¹ *Ib.*, Dimitrov, S., et al. 2004.

³² 3MA01252037.

³³ 3M, 1976 [3MA01252037].

246. The Ansul Company (Tyco), published a report in 1977 titled “Environmentally Improved AFFF.”³⁴ This report acknowledges that AFFFs were understood to be environmentally damaging and could pose potential negative impacts to water quality. Ansul wrote: “The purpose of this work is to explore the development of experimental AFFF formulations that would exhibit reduced impact on the environment while retaining certain fire suppression characteristic...improvements [to AFFF formulations] are desired in the environmental area, i.e., development of compositions that have a reduced impact on the environment without loss of fire suppression effectiveness.”³⁵ Its study showed it had the ability to reformulate its AFFF products to be biodegradable, but there is no evidence that any company bothered to do so.

247. Also, in 1979 Defendant 3M carried out a comprehensive biodegradation and toxicity study covering investigations between 1975 and 1978.³⁶ More than 10 years after 3M began selling its AFFF products it wrote “there has been a general lack of knowledge relative to the environmental impact of these chemicals,” and ominously disclosed, “[i]f these materials are not biodegradable, what is their fate in the environment?”³⁷

248. Defendants failed to comply with their obligations to notify EPA about the “substantial risk of injury to health or the environment” posed by their AFFF products containing PFOS/A. See TSCA § 8(e).

³⁴ Ansul Co., Final Report: Environmentally Improved AFFF, N00173-76-C-0295, Marinette, WI, Dec. 13, 1977.

³⁵ *Id.*

³⁶ 3MA00326828.

³⁷ *Id.*

D. Old DuPont's Fraudulent Plans to Shield its Assets From its PFAS Liabilities

249. By 2013, Old DuPont faced mounting liabilities arising out of its long-running manufacture, use, marketing, distribution, and sale of PFOA and/or its chemical precursors throughout the country. These liabilities included, among other things, clean-up costs, remediation obligations, tort damages, natural resources damages, and potential punitive damages.

250. Upon information and belief, by 2013, in order to shield its assets from these liabilities and make itself a more appealing merger partner, Old DuPont began to consider and/or engage in a complex series of corporate restructurings and spin-offs.

251. In or around 2014, Old DuPont formed The Chemours Company as a wholly-owned and operated subsidiary. Shortly thereafter, Old DuPont transferred its "Performance Chemicals" business (which included Teflon® and other products, the manufacture of which involved the use of PFOA and other PFAS) to Chemours.

252. At the time of the transfer of its Performance Chemicals business to Chemours, Old DuPont had been sued, threatened with suit, and/or had knowledge of the likelihood of litigation to be filed regarding Old DuPont's liabilities for damages and injuries arising from its manufacture and sale of its PFAS products, including PFOA and its chemical precursors.

253. Upon information and belief, prior to the spinoff, Chemours was a wholly-owned subsidiary of Old DuPont and its four-member Board of Directors consisted of three Old DuPont employees and a former member of Old DuPont's Board of Directors. Then, effective immediately prior to the spinoff, the Chemours Board of Directors doubled in size, the three Old DuPont employees resigned, and seven new members were appointed to fill the vacancies. This new Chemours Board of Directors did not take part in negotiating the Separation Agreement.

254. In or around July 1, 2015, Old DuPont completed the spin-off Chemours as a separate public entity and saddled Chemours with Old DuPont's massive PFAS liabilities.

255. Although many of the details of the Separation Agreement remain largely hidden from the public, upon information and belief, as part of the Separation Agreement, Chemours accepted broad assumption of Old DuPont's environmental liabilities arising out of its long-running manufacture, use, discharge, marketing, distribution, and sale of PFAS.

256. Additionally, Chemours agreed to assume for itself and indemnify Old DuPont against all liabilities relating to or arising from the operation of the Performance Chemicals business at any time and regardless of which entity is named in any action or against whom such liabilities are asserted or determined.

257. Further, Chemours agreed to assume for itself and indemnify Old DuPont from all environmental liabilities that arose prior to the spinoff if Old DuPont reasonably determined that 50.1% of the liabilities were attributable to the Performance Chemicals business.

258. Upon information and belief, the value of the assets Chemours transferred to Old DuPont was substantially more than the value of the assets it received from Old DuPont, and Chemours assumed billions of dollars of Old DuPont's PFAS and other liabilities.

259. Old DuPont knew that Chemours was undercapitalized and unable to satisfy the massive liabilities that it assumed from Old DuPont. In addition to the assumption of such liabilities, Chemours was required to provide broad indemnification to Old DuPont in connection with these liabilities, which is uncapped and does not have a survival period.

260. In or around December 2015, Old DuPont entered into an agreement with Dow, Inc. ("Old Dow") pursuant to which Old DuPont and Old Dow merged with subsidiaries of a newly

formed holding company, DowDuPont, Inc. (“DowDuPont”), which was created solely for the purpose of effectuating the merger. Old DuPont and Old Dow became subsidiaries of DowDuPont.

261. Following its creation, DowDuPont engaged in a number of realignments and divestitures, the details of which remain largely hidden from Plaintiff and other creditors, intended to frustrate and/or hinder creditors with claims against Old DuPont. Upon information and belief, the net effect of these transactions was the transfer, directly or indirectly, of a substantial portion of Old DuPont’s assets to DowDuPont for far less than these assets were worth.

262. By 2019, DowDuPont spun-off two new publicly traded companies, Corteva, Inc. and Dow, Inc. (“New Dow”). DowDuPont was then renamed DuPont de Nemours, Inc. (“New DuPont”).

263. Upon information and belief, Corteva currently holds Old DuPont as a subsidiary.

264. Upon information and belief, as part of the DowDuPont Separation Agreement, Corteva and New DuPont also assumed direct financial liability of Old DuPont that was not related to the Agriculture, Material Science, or Specialty Products Businesses, including the PFAS liabilities which are allocated on a pro rata basis between Corteva and New DuPont.

E. The Impact on Plaintiff’s CWW Water Supply, Treatment Facilities, and Distribution Systems

265. AFFF Contamination poses a serious threat to human health and Plaintiff’s water supply and property.

266. Surface waters are precious limited, and invaluable natural resources that are used for drinking water and are vital to the health, safety, and welfare of residents serviced by Columbus Water Works.

267. Surface waters such as lakes, rivers, and wetlands can receive groundwater inflow and recharge groundwater. The movement of water between ground water and surface-water systems leads to the mixing of their water qualities.

268. Upon information and belief, at all times pertinent herein, Defendants' Fluorosurfactant Products have been released, used, stored and/or disposed of at, near, and/or in the vicinity of the Plaintiff's Property, including Plaintiff's water supply sources. During these activities, Defendants' Fluorosurfactant Products were released, used, stored, cleaned up, and/or disposed of as directed and intended by the Defendants, which allowed PFAS to enter the environment, and migrate through the surface water, thereby contaminating Plaintiff's Property.

269. PFAS have been detected in varying amounts, at varying times in Plaintiff's Property. PFOA, PFOS, and PFBS have been detected and/or are present in certain areas of Plaintiff's Property. PFOA, PFOS, and PFBS have been detected at Plaintiff's Property at levels that are greater than the current Federal Advisory Levels. The detection and/or presence of PFOA, PFOS, and PFBS, and the threat of further detection and/or presence of PFOA, PFOS, and PFBS in Plaintiff's Property in varying amounts and at varying times has resulted, and will continue to result, in significant costs, injuries and damage to Plaintiff.

270. Upon information and belief, the invasion of Plaintiff's Property with PFOA, PFOS, and PFBS is recurring, resulting in new harm to Plaintiff on each occasion.

271. Defendants have contaminated and injured drinking water that is drawn from surface water sources and at additional locations yet to be determined with AFFF contamination.

272. The injuries to Plaintiff caused by Defendants' conduct and fluorosurfactant products, including but not limited to AFFF, constitute an unreasonable interference with, and damage to, Plaintiff and Plaintiff's Property. Plaintiff's interests in protecting its Property

constitute a reason for seeking damages sufficient to restore such Property to its pre-contamination condition, in addition to the other damages sought herein.

CAUSES OF ACTION

First Cause of Action

Strict Product Liability Based on Design Defect (Against all Defendants)

273. Plaintiff repeats and restates the allegations set forth in paragraphs 1-272 as if fully restated in this cause of action.

274. At all times relevant herein, Defendants were engaged in the business of researching, designing, manufacturing, testing, marketing, distributing, and/or selling Fluorosurfactant Products, including AFFF containing PFAS. By doing so, Defendants impliedly warranted that AFFF was merchantable, safe, and fit for ordinary purposes for which it was used, including for firefighting training exercises.

275. It was reasonably foreseeable that the AFFF containing PFAS that Defendants manufactured and/or distributed and sold would be used in and around the CWW Service Area and watershed.

276. It was reasonably foreseeable that the AFFF containing PFAS that Defendants manufactured and/or distributed and sold would contaminate the surface water in and around the CWW Service Area and cause damages.

277. Defendants' AFFF products were manufactured for placement into trade or commerce.

278. Defendants marketed and sold AFFF for use in controlling and extinguishing aviation, marine, fuel, and other shallow spill fires.

279. As manufacturers, Defendants owed a duty to all persons whom its products might foreseeably harm, including Plaintiff, not to market any product which is unreasonably dangerous in design for its reasonably anticipated use.

280. By manufacturing and selling AFFF containing PFAS, Defendants warranted that such AFFF was merchantable, safe, and fit for ordinary purposes.

281. The AFFF as manufactured and/or sold by Defendants reached the CWW Service Area without substantial change in its condition and was used for fire training and suppression at various locations in and around the CWW Service Area in a reasonably foreseeable and intended manner.

282. The AFFF, as manufactured and/or sold by the Defendants, was “defective” and “unreasonably dangerous” when it left the Defendants’ control, entered the stream of commerce, and was received by Plaintiff because it was dangerous to an extent beyond that which would be contemplated by the ordinary user of AFFF.

283. The AFFF manufactured and/or sold by Defendants was defective in design because, even when used as intended and directed by AFFF Defendants, it can result in the contamination of the surface water with PFAS creating a significant threat to surface water, groundwater and drinking water supplies.

284. The AFFF manufactured and/or sold by Defendants did not meet a consumer’s reasonable expectation as to its safety because of its propensity to contaminate surface water when used as intended.

285. Defendants failed to develop and make available alternative AFFF products that were designed in a safe or safer manner, even though such products were technologically feasible,

practical, commercially viable, and marketable at the time Defendants introduced AFFF containing PFAS into the stream of commerce.

286. The specific risk of harm in the form of surface water and drinking water contamination from AFFF containing PFAS that Defendants manufactured and/or sold was reasonably foreseeable or discoverable by Defendants.

287. PFAS are dangerous to an extent beyond that which would be contemplated by the ordinary consumer of AFFF.

288. The design, formulation, manufacture and/or distribution and sale of AFFF containing PFAS that were known to be toxic and extremely mobile and persistent in the environment, was unreasonably dangerous.

289. Defendants' introduction of AFFF containing PFAS into the stream of commerce was a proximate cause of the surface water contamination requiring CWW's investigation, clean-up, abatement, remediation, and monitoring costs and other damages in an amount to be determined at trial. Defendants are strictly, jointly, and severally liable for all such damages.

Second Cause of Action
Strict Product Liability Based on Failure to Warn
(Against all Defendants)

290. Plaintiff repeats and restates the allegations set forth in paragraphs 1-272 as if fully restated in this cause of action.

291. The use of AFFF in and around the CWW Service Area for training fire personnel in the use of AFFF, and its use in firefighting activities were reasonably foreseeable uses. Defendants knew or should have known that AFFF used in this manner can contaminate surface water with PFAS, creating a significant threat to human health and the environment.

292. It was foreseeable that PFAS from the AFFF that Defendants manufactured and sold would enter the surface water in and around the CWW Service Area and would result in the contamination of the drinking water supplies that rely upon the surface water, such as Lake Oliver and the Chattahoochee River, for the source of drinking water.

293. Defendants had a duty to warn the users of AFFF, including Plaintiff, of these hazards.

294. Defendants, however, failed to provide adequate warnings of these hazards.

295. Defendants' failure to issue the proper warnings relating to AFFF containing PFAS affected the market's acceptance of AFFF containing PFAS.

296. Defendants' failure to issue the proper warnings relating to AFFF containing PFAS prevented the users of the product from treating it differently with respect to its use and environmental cleanup.

297. Defendants' failure to issue the proper warnings related to AFFF containing PFAS prevented the users of the product from seeking alternative products including, but not limited to, using alternative products for purposes of training in the use of AFFF.

298. Defendants' action in placing AFFF containing PFAS into the stream of commerce was a direct and proximate cause of Plaintiff's damages.

299. As a direct and proximate result of the Defendants' failure to warn, Plaintiff has suffered damages which include, but are not limited to, requiring investigation, clean-up, abatement, remediation, and monitoring costs, and other damages in an amount to be determined at trial. The Defendants are strictly, jointly, and severally liable for all such damages.

Third Cause of Action

Negligence

(Against all Defendants)

300. Plaintiff repeats and restates the allegations set forth in paragraphs 1-272 as if fully restated in this cause of action.

301. Defendants had a duty to Plaintiff to manufacture and/or market, distribute, and sell their AFFF in a manner that avoided contamination of the environment and drinking water supplies and avoided harm to those who foreseeably would be injured by the PFAS contained in Defendants' AFFF products.

302. The use of Defendants' AFFF products in and around the CWW Service Area were reasonably foreseeable uses. Defendants knew or should have known that its AFFF used in this manner would contaminate the surface water with PFAS, creating a significant threat to human health and the environment. The Defendants had a duty to prevent the release of PFAS, in the foreseeable uses of AFFF.

303. Defendants breached their duties when they negligently manufactured a dangerous product (AFFF), negligently marketed, distributed, and sold that product, and/or negligently failed to give adequate warning that such products should not have been used in a manner such as to result in the contamination of the surface water.

304. As a direct and proximate result of Defendants' breaches of their duties, Defendants caused Plaintiff to suffer actual losses. Specifically, Plaintiff suffered and continues to suffer damage requiring investigation, clean-up, abatement, remediation, and monitoring costs and suffered other damages in an amount to be determined at trial.

305. Despite the fact that Defendants knew or should have known that PFAS are toxic, can contaminate water resources and are carcinogenic, Defendants negligently: designed, manufactured, formulated, handled, labeled, instructed, controlled, marketed, promoted, and/or sold AFFF Products containing PFAS; issued deficient instructions on how their AFFF should be

used and disposed of, thereby permitting PFAS to contaminate the surface water in and around the CWW Service Area; failed to recall and/or warn the users of their AFFF of the dangers of groundwater contamination as a result of standard use and disposal of their products; failed and refused to issue the appropriate warning and/or recalls to the users of their AFFF; and failing to take reasonable, adequate, and sufficient steps or actions to eliminate, correct, or remedy any contamination after it occurred.

306. As a direct and proximate result of Defendants' breaches of their duties, Defendants caused Plaintiff to suffer actual losses. Specifically, Plaintiff suffered and continues to suffer damage requiring investigation, clean-up, abatement, remediation, and monitoring costs and suffered other damages in an amount to be determined at trial.

Fourth Cause of Action
Public Nuisance
(Against all Defendants)

307. Plaintiff repeats and restates the allegations set forth in paragraphs 1-272 as if fully restated in this cause of action.

308. A nuisance is "anything that causes hurt, inconvenience, or damage to another and the fact that the act done may otherwise be lawful shall not keep it from being a nuisance."³⁸

309. Under Georgia law, a "public nuisance" is defined as one "which damages all persons who come within the sphere of its operation, though it may vary in its effects on individuals."³⁹

310. "Significant interference with the 'public health, the public safety, the public peace, the public comfort or the public convenience' may support a finding of public nuisance."⁴⁰

³⁸ O.C.G.A. § 41-1-1.

³⁹ O.C.G.A. § 41-1-2.

⁴⁰ *City of College Park v. 2600 Camp Creek, LLC*, 293 Ga. App. 207, 208 (2008).

311. Plaintiff is the owner of land, easements, and water rights which permit it to extract surface water from Lake Oliver and the Chattahoochee River for use in its water system.

312. The actions of the Defendants, as alleged herein, have resulted in the continuing contamination of Plaintiff's water source by PFAS, and constitutes a nuisance.

313. Each Defendant has caused, maintained, assisted and/or participated in such nuisance, and is a substantial contributor to such nuisance.

314. The actions of the Defendants constitute a nuisance in that the contamination of surface water and drinking water is injurious to public health, is indecent or offensive to the senses and is an obstruction to the Plaintiff's free use of its property, so has interfered with Plaintiff's ability to provide safe drinking water to the public.

315. The contamination of the surface water and public drinking water supply significantly affects, at the same time, a considerable number of people in an entire community.

316. Plaintiff's resources are being overwhelmed in efforts to mitigate contamination caused by the Defendants' products.

317. By its design, the Defendants' Fluorosurfactant Products, specifically PFAS-containing AFFF, were known by Defendants to contain compounds that would likely be discharged to the environment in a manner that would create a nuisance and further failed to properly instruct intermediaries and end-users to properly use and dispose of such contaminants in such a manner as to avoid creating or contributing to a nuisance.

318. The Defendants knew, or should have known, of the harmful effects and adverse impacts that exposure to PFAS would have on the environment and human health.

319. The Defendants caused or contributed to the creation of the nuisance at issue by directing and instructing intermediaries and end users of its products to dispose of products and

materials containing PFAS in a manner that the Defendants knew or should have known would result in the contamination of the surface water and ultimately impact drinking water.

320. As a direct and proximate result of the Defendants' acts and omissions as alleged herein, Plaintiff's surface water has been, and continues to be, contaminated with PFAS, causing Plaintiff significant injury and damage.

321. As a direct and proximate result of these Defendants' acts and omissions as alleged herein, Plaintiff has incurred, is incurring, and will continue to incur, investigation, treatment, remediation, and monitoring costs and expenses related to the PFAS in an amount to be proved at trial.

322. Furthermore, as a direct and proximate result of the Defendants' acts and omissions as alleged herein, the contamination of surface water and drinking water supplies constitutes an ongoing public nuisance.

323. The Defendants are jointly and severally responsible to take such action as is necessary to abate the public nuisance and to take such action as is necessary to ensure that the PFAS that contaminate the surface water and other water resources supplying water to the Plaintiff's water system do not present a risk to the public.

324. Plaintiff has been damaged because the Defendants' acts and omissions, have unreasonably interfered with, and continue to interfere with, Plaintiff's use and enjoyment of its public water supply systems and has suffered and continues to suffer significant damages and injuries, including but not limited to, incurring costs related to the investigation, sampling, treatment system design, acquisition, installation, operations and maintenance, and other costs and damages related to the detection and remediation of the PFAS contamination of its water supply systems.

325. The Defendants knew and/or should have known that it was substantially certain that their alleged acts and omissions described in this Complaint would cause injury and damage, including contamination of drinking water supplies with PFAS.

326. The Defendants knew with substantial certainty at the time of their manufacture and sale of fluorosurfactants, fluorochemicals, and AFFF containing PFAS that their products would result in contamination of in and around the CWW Service Area as well as its drinking water resources.

327. The Defendants' acts and omissions were substantially certain to and did result in an unreasonable interference with Plaintiff's use of its property.

328. As a direct and proximate result of the Defendants' acts and omissions, the Defendants caused Plaintiff to suffer actual losses.

329. The Defendants committed each of the above-described acts and omissions knowingly, willfully, and with oppression, fraud, and/or malice. Such conduct was performed to promote sales of AFFF, fluorosurfactants, and fluorochemicals to maximize profits, in conscious disregard of the probable dangerous consequences of that conduct and its foreseeable impact upon health, property and the environment.

330. Specifically, Plaintiff suffered damage requiring investigation, clean-up, abatement, remediation, and monitoring costs and suffered other damages in an amount to be determined at trial.

331. Additionally, Plaintiff also requests an award of exemplary damages in an amount that is sufficient to punish these Defendants and that fairly reflects the aggravating circumstances alleged herein.

Fifth Cause of Action
Private Nuisance
(Against all Defendants)

332. Plaintiff repeats and restates the allegations set forth in paragraphs 1-272 as if fully restated in this cause of action.

333. Plaintiff is the owner of land, easements, and water rights that permit it to extract surface water from Lake Oliver and the Chattahoochee River to provide drinking water to its customers.

334. Defendants' intentional, negligent, and/or reckless conduct, as alleged herein, has resulted in substantial contamination of Plaintiff's surface water by PFAS.

335. Defendants' manufacture, distribution, sale, supply, and marketing of AFFF containing PFAS was unreasonable because Defendants had knowledge of PFAS's unique and dangerous chemical properties and knew that contamination of public surface water was substantially certain to occur, but failed to provide adequate warnings of, or take any other precautionary measures to mitigate, those hazards.

336. The contamination caused, contributed to, and/or maintained by Defendants substantially and unreasonably interferes with Plaintiff's property rights to appropriate, use, and enjoy water from its surface water sources.

337. Each Defendant has caused, contributed to, and/or maintained such nuisance, and is a substantial contributor to such nuisance.

338. As a direct and proximate result of Defendants' acts and omissions as alleged herein, Plaintiff has incurred, is incurring, and will continue to incur damages related to PFAS contamination of its surface water in an amount to be proved at trial.

339. Defendants knew it was substantially certain that their acts and omissions described above would cause injury and damage, including PFAS contamination of Plaintiff's surface water supply. Defendants committed each of the above-described acts and omission knowingly, willfully, and with oppression, fraud, and/or malice. Such conduct was performed to promote sales of AFFF, in conscious disregard to the probable dangerous consequences of that conduct and its reasonably foreseeable impacts on public health and welfare.

340. Specifically, Plaintiff suffered damage requiring investigation, clean-up, abatement, remediation, and monitoring costs and suffered other damages in an amount to be determined at trial.

341. Additionally, Plaintiff also requests an award of exemplary damages in an amount that is sufficient to punish these Defendants and that fairly reflects the aggravating circumstances alleged herein.

Sixth Cause of Action

Violation of Georgia's Uniform Voidable Transactions Act

(Against DuPont, Chemours Co., Chemours FC, Corteva, Inc., DuPont de Nemours, Inc., E. I. DuPont de Nemours and Company)

342. Plaintiff repeats and restates the allegations set forth in paragraphs 1-272 as if fully restated in this cause of action.

343. Plaintiff seeks equitable and other relief pursuant to the Georgia Uniform Voidable Transactions Act ("GUVTA"), O.C.G.A. § 18-2-74, et seq., against the DuPont Defendants.

344. Under the GUVTA,

[a] transfer made or obligation incurred by a debtor is voidable as to a creditor, whether the creditor's claim arose before or after the transfer was made or the obligation was incurred, if the debtor made the transfer or

incurred the obligation: (1) With actual intent to hinder, delay, or defraud any creditor of the debtor; or (2) Without receiving a reasonably equivalent value in exchange for the transfer or obligation, and the debtor: (A) Was engaged or was about to engage in a business or a transaction for which the remaining assets of the debtor were unreasonably small in relation to the business or transaction; or (B) Intended to incur, or believed or reasonably should have believed that he or she would incur, debts beyond his or her ability to pay as they became due.

O.C.G.A. § 18-2-74.

345. The DuPont Defendants are liable for fraudulent transfer pursuant to O.C.G.A. § 18-2-74 because the DuPont Defendants have (1) acted with actual intent to hinder, delay, and defraud parties, and/or (2) without receiving a reasonably equivalent value in exchange for the transfer or obligation, and (A) were engaged or were about to engage in a business for which the remaining assets of Chemours Co. were unreasonably small in relation to the business; or (B) intended to incur, or believed or reasonably should have believed that The Chemours Co. would incur debts beyond its ability to pay as they became due.

346. DuPont engaged in acts in furtherance of a scheme to transfer Old Dupont's assets out of the reach of parties such as Plaintiff that have been damaged as a result of DuPont's conduct, omissions, and actions described in this Complaint.

347. It is primarily Old Dupont, rather than Chemours Co., that for decades manufactured, marketed distributed, and/or sold PFOA or AFFF containing PFOA with the superior knowledge that they were toxic, mobile, persistent, bioaccumulative, and biomagnifying, and through normal and foreseen use, would injure Plaintiff.

348. As a result of the transfer of assets and liabilities described in this Complaint, DuPont has attempted to limit the availability of assets to cover judgments for all of the liability for damages and injuries from the manufacturing, marketing, distribution, and/or sale of PFOA or AFFF containing PFOA.

349. At the time of the transfer of its Performance Chemicals Business to Chemours Co., Old Dupont had been sued, threatened with suit and/or had knowledge of the likelihood of litigation to be filed regarding DuPont's liability for damages and injuries for the manufacturing, marketing, distribution, and/or sale of PFOA or AFFF containing PFOA.

350. DuPont acted without receiving a reasonably equivalent value in exchange for the transfer or obligation, and Old Dupont believed or reasonably should have believed that Chemours Co would incur debts beyond Chemours Co.'s ability to pay as they became due.

351. At all times relevant to this action, the claims, judgment and potential judgments against The Chemours Company potentially exceed The Chemours Company's ability to pay.

352. Pursuant to O.C.G.A. § § 18-2-74, Plaintiff seeks avoidance of the transfer of Old Dupont's liabilities for the claims brought in this Complaint and to hold DuPont liable for any damages or other remedies that may be awarded by the Court or jury under this Complaint.

353. Plaintiff further seeks all other rights and remedies that may be available to it under the GUVTA, including pre-judgment remedies as available under applicable law, as may be necessary to fully compensate Plaintiff for the damages and injuries it has suffered as alleged in this Complaint.

Seventh Cause of Action
Unjust Enrichment
(Against All Defendants)

354. Plaintiff repeats and restates the allegations set forth in paragraphs 1-272 as if fully restated in this cause of action.

355. As an expected and intended result of their conscious wrongdoing as set forth in this Complaint, Defendants have profited and benefited from the PFAS contamination of surface water, groundwater and soil throughout the United States, including Plaintiff's surface water sources.

356. Unjust enrichment arises not only where an expenditure by one party adds to the property of another, but also where the expenditure saves the other from expense or loss.

357. Plaintiff CWW has conferred a benefit upon Defendants by paying for Defendants' externalities: the cost of the harms caused by Defendants' improper design, manufacturing, marketing, distribution, sales and warnings regarding the dangers to the environment and human life posed by their Fluorosurfactant Products, including AFFF products containing PFAS. Moreover, Plaintiff has incurred expenditures, and will incur additional expenditures, for testing, remediation, disposal and other services over and above Plaintiff's ordinary water testing and treatment services.

358. The large-scale PFAS contamination crisis created by the Defendants is not a single accident/event. Rather, it is a public harm of substantial magnitude that was caused by the Defendants' intentional, repetitive, and persistent course of deceptive conduct.

359. The Defendants designed, manufactured, distributed and sold, through materially deceptive marketing campaigns that failed to alert the public about the risks of PFAS contamination as a result of the use of their Fluorosurfactant Products, including AFFF products containing PFAS.

360. Plaintiff CWW has incurred expenditures over and above their ordinary operation costs, and will continue to incur such costs for years, if not decades, as they continue efforts to remediate PFAS contamination caused by Defendants' products.

361. Defendants were, and are, aware of these obvious benefits, and their retention of these benefits is unjust.

362. Because of their conscious failure to exercise due diligence and provide adequate warnings to prevent the widespread PFAS contamination, Defendants obtained enrichment that they would not otherwise have obtained. This enrichment was without justification.

363. Defendants, through the wrongful conduct described above, have been unjustly enriched at the expense of public water systems like Plaintiff CWW.

364. In equity and good conscious, it would be unjust and inequitable to permit Defendants to enrich themselves at the expense of Plaintiff.

365. Plaintiff seeks an order compelling Defendants to disgorge all unjust enrichment to Plaintiff and award such other, further, and different relief as the Court may deem just.

PUNITIVE DAMAGES

366. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

367. At all times material, Defendants had actual knowledge of the wrongfulness of their conduct and the high probability that injury or damage to the Plaintiff would result, and despite that knowledge, willfully, wantonly, and recklessly pursued their course of conduct.

368. Defendants' conduct was so gross and flagrant as to show a reckless disregard or a conscious wanton, reckless indifference to consequences or a grossly careless disregard for the life, safety, property, or rights of the Plaintiff, and the Defendants actively and knowingly

participated in such conduct, and/or their officers, directors, or managers knowingly condoned, ratified or consented to such conduct.

369. Defendants' willful, wanton, malicious, and/or reckless conduct includes but is not limited to Defendants' failure to take all reasonable measures to ensure PFAS, which they knew would be harmful to Plaintiff, would not enter into public water systems, thus endangering the lives of the citizens to whom Plaintiff CWW provides water, as well as harming the environment and causing Plaintiff to incur significant damages to remediate the PFAS contamination, which warrants the imposition of punitive damages.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff demands judgment against Defendants as follows:

370. Enter judgment in its favor and against Defendants on each Count of this Complaint;

371. An order that Defendants pay all damages suffered by Plaintiff, including but not limited to investigation, clean-up, abatement, remediation, and monitoring costs incurred by Plaintiff, or for which Plaintiff is or was legally responsible, to comply with the EPA's proposed NPDWR and Georgia surface water target levels;

372. An order that Defendants are required to abate the nuisance Defendants have caused;

373. An order compelling Defendants to disgorge all unjust enrichment;

374. An order voiding the Chemours Transfers and the DuPont Transfers to the extent necessary to satisfy Plaintiff's claims;

375. An order enjoining New DuPont from distributing, transferring, capitalizing, or otherwise transferring any proceeds from the sale of any business lines, segments, divisions, or other assets that formerly belonged to Old DuPont;

376. An order imposing a constructive trust over any such proceeds for the benefit of the Plaintiff;

377. An award to Plaintiff for the costs of this suit (including but not limited to expert fees) and reasonable attorneys' fees, as provided by law;

378. An award for treble, punitive, and/or enhanced compensatory damages; and

379. An award for such other relief the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38, Plaintiff demands a jury trial.

Dated: July 24, 2023

[signature page follows]

COLUMBUS WATER WORKS

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